FULL ESTIMATED COST FILE 'BIOSIS' ENTERED AT 11:21:27 ON 29 AUG 2005 Copyright (c) 2005 The Thomson Corporation FILE 'MEDLINE' ENTERED AT 11:21:27 ON 29 AUG 2005 FILE 'CAPLUS' ENTERED AT 11:21:27 ON 29 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS) FILE 'WPIDS' ENTERED AT 11:21:27 ON 29 AUG 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION FILE 'USPATFULL' ENTERED AT 11:21:27 ON 29 AUG 2005 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS) \*\*\* YOU HAVE NEW MAIL \*\*\* => s whole tissue and cationic (4a)surfactant? 12 WHOLE TISSUE AND CATIONIC (4A) SURFACTANT? => s l1 and protease 9 L1 AND PROTEASE => dup rem 12 PROCESSING COMPLETED FOR L2 6 DUP REM L2 (3 DUPLICATES REMOVED) => d 13 bib abs 1-6 ANSWER 1 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN DUPLICATE 1 L3AN 2005-099961 [11] WPIDS CR 2003-370730 [35] DNC C2005-033420 DNN N2005-086813 Isolating nucleic acids from a biological sample by combining the sample with at least one cationic surfactant, at least one protease, and a buffer, to form a reaction composition. DC A89 B04 D16 P53 IN GREENFIELD, L; MONTESCLAROS, L (APPL-N) APPLERA CORP PA CYC ΡI US 2005009045 A1 20050113 (200511)\* US 2005009045 A1 CIP of US 2000-724613 20001128, Cont of US 2001-997169 ADT 20011128, US 2004-800137 20040311 FDT US 2005009045 Al Cont of US 6762027 PRAI US 2001-997169 20011128; US 2000-724613 20001128; US 2004-800137 20040311 AN 2005-099961 [11] WPIDS · CR 2003-370730 [35] AB US2005009045 A UPAB: 20050217 NOVELTY - Isolating nucleic acids from a biological sample comprising combining the sample with at least one cationic surfactant, at least one protease, and a buffer, to form a reaction composition, incubating the reaction composition at a

sample, and isolating the released nucleic acid, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) releasing nucleic acids from a biological sample, comprising:

temperature suitable for releasing nucleic acid from the biological

<sup>(</sup>a) combining the sample with at least one cationic

surfactant, at least one protease, and a buffer, to form
a reaction composition; and

- ' (b) incubating the reaction composition at a temperature suitable for releasing the nucleic acids from the biological sample; and
- (2) a kit for obtaining nucleic acid from a biological sample comprising at least one cationic surfactant and at least one protease.

USE - The methods and compositions of the present invention are useful for isolating and releasing nucleic acids from biological samples, including whole tissue.

ADVANTAGE - The methods of isolating nucleic acids in the present invention, as compared to prior art, reduces the time needed for sample preparation, decreases potential safety risks posed by multi-step procedures and provides high integrity high molecular weight nucleic acids.

Dwg.0/30

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L3 ANSWER 2 OF 6 USPATFULL on STN
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AN 2005:93362 USPATFULL

TI Treatment of tissue, instruments and work surfaces to remove infectious agents

IN Cunanan, Crystal M., Mission Viejo, CA, UNITED STATES Dinh, Tan Thanh, Fountain Valley, CA, UNITED STATES Loshbaugh, Christine, Irvine, CA, UNITED STATES Sarner, H. Chris, Laguna Hills, CA, UNITED STATES Helmus, Michael N., Worcester, MA, UNITED STATES

PI US 2005080040 A1 20050414

AI US 2004-959549 A1 20041005 (10)

RLI Division of Ser. No. US 2001-930619, filed on 15 Aug 2001, ABANDONED

DT Utility

FS APPLICATION

LREP John Christopher James, Edwards Lifesciences LLC, Law Dept., One Edwards Way, Irvine, CA, 92614, US

CLMN Number of Claims: 7
ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1261

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods of inactivating and removing infectious agents from tissues of use in bioprosthetic devices. The methods include the removal and blockage of binding sites on the tissues for the infectious agents. Also provided are methods for blocking a site on an infectious agent that binds to a site on the tissue.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 6 USPATFULL on STN

AN 2003:71989 USPATFULL TI Treatment of tissue.

Treatment of tissue, instruments and work surfaces to remove infectious agents

IN Cunanan, Crystal M., Mission Viejo, CA, UNITED STATES Dinh, Tan Thanh, Fountain Valley, CA, UNITED STATES Loshbaugh, Christine, Irvine, CA, UNITED STATES Sarner, H. Chris, Laguna Hills, CA, UNITED STATES Helmus, Michael N., Worcester, MA, UNITED STATES

PI US 2003050276 A1 20030313

AI US 2001-930619 A1 20010815 (9)

DT Utility

FS APPLICATION

LREP Edwards Lifesciences LLC, Law Dept., One Edwards Way, Irvine, CA, 92614

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1331

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of inactivating and removing infectious agents from tissues of use in bioprosthetic devices. The methods include the removal and blockage of binding sites on the tissues

for the infectious agents. Also provided are methods for blocking a site on an infectious agent that binds to a site on the tissue.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

US 6762027

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ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
L3
AN
     2002:869079 CAPLUS
DN
     137:365972
     Isolation of nucleic acids from biological samples using surfactants and
ΤI
     proteases
     Greenfeld, I. Larry
ΙN
PA
     PE Corporation, USA; Applera Corporation
SO
     PCT Int. Appl., 129 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 2
                        KIND
                                DATE
                                           APPLICATION NO. DATE
PΙ
     WO 2002090539
                         A2
                                20021114
                                             WO 2001-US45071
                                                                     20011128
     WO 2002090539
                         A3
                                20030807
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
             UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2429941
                          AA
                                 20021114
                                             CA 2001-2429941
                                                                     20011128
     EP 1354036
                          A2
                                 20031022
                                             EP 2001-274041
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                         T2
                                20050120
                                             JP 2002-587600
                                                                     20011128
     JP 2005501523
PRAI US 2000-724613
                                 20001128
                          Α
     WO 2001-US45071
                         W
                                 20011128
     The invention relates to compns. and methods for isolating nucleic acids
AΒ
     from biol. samples, including whole tissue. The
     method comprises contacting the biol. sample with a disrupting buffer
     containing proteases (e.g., Proteinase K) and a cationic
     surfactant (e.g., CTAB). The cationic
     surfactant is then neutralized either by its removal or by use of
     a second nonionic surfactants (e.g., Tween 20). Nucleic acids are then
     isolated by binding to a solid phase, such as glass fiber GF/B filters.
     The effects of cationic surfactants on activity of
     proteinase K, and the solubility of surfactants in different chaotropes is
     investigated to identify optimal cationic surfactants
     and salts. The invention also provides kits for isolating nucleic acids
     from biol. samples.
     ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
L3
     2002:907069 CAPLUS
ΑN
DN
     138:1959
     Compositions, methods, and kits for isolating nucleic acids using
TI
     surfactants and proteases
IN
     Greenfield, Lawrence; Montesclaros, Luz
PΑ
     Applera Corp., USA
SO
     U.S. Pat. Appl. Publ., 57 pp., Cont.-in-part of U.S. Ser. No. 724,613.
     CODEN: USXXCO
DT
     Patent
LΑ
     English
FAN.CNT 2
                        KIND
     PATENT NO.
                                DATE
                                             APPLICATION NO.
                                                                     DATE
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                         A1
     US 2002177139
                                20021128
                                             US 2001-997169
                                                                     20011128
PT
                         B2
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20040713

US 2005009045 **A1** 20050113 US 2004-800137 20040311 PRAI US 2000-724613 A2 20001128 US 2001-997169 A1 20011128 The invention relates to compns. and methods for isolating nucleic acids from biol. samples, including whole tissue. The invention also provides kits for isolating nucleic acids from biol. samples. A method for obtaining nucleic acid from a biol. sample and binding the nucleic acid to a solid phase comprises (a) contacting the biol. sample with a disrupting buffer, wherein the disrupting buffer comprises a protease and a cationic surfactant ; (b) substantially neutralizing the cationic surfactant ; and (c) binding the nucleic acid to a solid phase. Genomic DNA was isolated from several rat tissues and mouse tail using a digestion solution containing 1 mg of Proteinase K, 1 % DTAB, 100 mM Tris-HCl (pH 8.0), 20 µM ATA, and 20 mM CaCl2 and incubating for 60 min at 65°. Most of the tissues were effectively digested in less than one hour. Digestion of liver, brain and kidney were about 95 % complete after one hour. Following digestion, binding solution containing 5 M GuSCN, 50 mM MES (pH 6.0), 20 mM EDTA, and 6 % Tween 20 was then added to each sample and the samples were placed on GF/B filter membranes for washing and recovery of DNA. RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT L3ANSWER 6 OF 6 USPATFULL on STN 2002:251081 USPATFULL AN TI Methods for preparation of bioprosthetic tissue and implantable devices comprising such bioprosthetic tissue IN Cunanan, Crystal M., Mission Viejo, CA, UNITED STATES Dinh, Tan Thanh, Fountain Valley, CA, UNITED STATES Loshbaugh, Christine, Irvine, CA, UNITED STATES Sarner, H. Chris, Laguna Hills, CA, UNITED STATES Helmus, Michael N., Worcester, MA, UNITED STATES Cabiling, Christine M., Tustin, CA, UNITED STATES PΙ US 2002137024 A1 20020926 ΑI US 2001-4624 A1 20011101 (10) Continuation-in-part of Ser. No. US 2001-930619, filed on 15 Aug 2001, RLI PENDING PRAI US 2000-244889P 20001101 (60) DTUtility FS APPLICATION LREP Edwards Lifesciences LLC, Law Dept., One Edwards Way, Irvine, CA, 92614 CLMN Number of Claims: 60 ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 1761

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of inactivating and removing infectious agents from tissues of use in bioprosthetic devices. The methods include the removal and blockage of binding sites on the tissues for the infectious agents. Also provided are methods for blocking a site on an infectious agent that binds to a site on the tissue. The invention also provides a method for preventing or reducing the calcification of a bioprosthetic tissue. The method includes removing or blocking a phospholipid calcium nucleation site from the tissue.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.